

Confidential Facts – Round 1 -- State of California

The State of California has kept a nervous eye on the Mine site for the past few years, noting that the County of Mirabeau has done little, if anything, to address the environmental issues at the site. In fact, the State thinks the County has likely exacerbated the conditions by grading and moving contaminated soil around the site, and by using the Pit Lake water to irrigate the Rock Pile. As the State is primarily interested in the water quality conditions at the site, the State has certain priorities for clean up.

Pit Lake

First, the State wants to ensure that the Pit Lake will not spill over into the adjacent creek. This is the most important issue for the State in negotiations with the County. The pit is refilling at a rate that is much greater than previously predicted by Sainte Devote's experts when they sold the Mine site to the County. The State believes that the time to act on the Pit Lake is now.

A variety of potential remedies can be applied to the Pit Lake. One relatively inexpensive option would be to increase the rate of evaporation from the Pit Lake, by using aerators or laying out some additional evaporation ponds on the flat sections of the site. The State believes the cost of implementing these measures will be about \$1 million over the next 5 years. Small electric pumps can be used, which would require little maintenance, and could effectively keep the Pit Lake at current levels. Of course, these are remedies that would have to operate in perpetuity and would be an ongoing cost to the County potentially forever. Also, these remedies would likely have the tendency to continue to concentrate pollutants in the pit over time, as water is evaporated.

A better, but far costlier solution, would be to install a pump and treat system at the site, which would pump water from the Pit Lake, treat it within the system, and release it to the nearby creek. One of the benefits of this proposal is that the system would not only prevent polluted water from flowing off site, but would potentially substantially reduce the current water levels in the Pit Lake. The construction for this system will take six months. To build it, the County would have to obtain a permit to discharge to the creek, and as part of its permit conditions, it would have to treat the Pit Lake water to background water quality levels before it could be discharged to the creek.

A pump and treat system that would be capable of treating 5,000 gallons per day would cost approximately \$3 million to install and would require an annual operating budget of approximately \$25,000, primarily for pump maintenance and for disposal of contaminants removed from the water. Recent years have shown that the Pit Lake is refilling at an approximate rate of 4,000 gallons per day. However, recent years have been dry weather years. Future years with greater rainfall would result in the Pit Lake filling faster. An increased capacity treatment system capable of treating up to 10,000 gallons per day would cost approximately \$5 million to install, and would require a similar annual operating budget of \$25,000.

The State of California wants the County to both implement immediate remedies of aeration and evaporation, and also install the 10,000 gallon per day treatment system within the next 2 years.

Rock Pile

The State of California believes that the Rock Pile is likely discharging arsenic and other contaminants to the groundwater aquifer every year during the rainy season, as rainfall percolates down through the Rock Pile, picking up contaminants as it goes. Well testing by Sainte Devote in 2006 showed an arsenic plume in groundwater immediately to the south of the Rock Pile, although no further testing has been done by the County since it acquired the Mine Site. The State of California has sampled nearby residential wells, and thus far none have shown any contamination. The State, however, is concerned that if nothing is done with the Rock Pile, the arsenic plume will continue to migrate and will eventually impact residential wells. Moreover, the State thinks the County has exacerbated the problem by attempting to grow vegetation on the Rock Pile and irrigating that vegetation with water from the Pit Lake.

The Rock Pile needs a properly engineered cover. The State believes that for approximately \$4 million the County could (a) grade the Rock Pile (\$750,000), (b) install a 2 foot thick impermeable layer of clay soil (\$2,250,000), and (c) establish a vegetative cover layer (\$1,000,000). A less expensive solution (although not as effective) would be to use a 1 foot thick impermeable layer (\$1,250,000). Also, the County has to stop irrigating the Rock Pile with water from the Pit Lake. The State of California believes that the Mine site has a water supply, but is unaware of the cost of that water to the County. Once established, the Rock Pile cover would require very little maintenance.

Water Supply

The citizens who live near the Mine site have frequently complained to State and County officials that they are concerned that their residential water wells are or will be contaminated. They want a guaranteed water supply. There are approximately 50 residences near the Mine site that could be impacted. The cost of hooking up the 50 residences to the County's municipal water system would be approximately \$750,000. The State of California believes in an abundance of caution, the County should immediately commence to hook up the residences and guarantee them a good, clean drinking water supply.

Grant Funding

As part of a federal stimulus package, the regulatory agency has been given funds to create jobs and build public infrastructure to improve and protect water quality. The federal legislation authorizing these funds requires that any funds disbursed be grants to local public agencies (e.g., counties, cities, water districts). The grants must be for shovel-ready projects that begin construction within the next nine to twelve months.

The grant program also requires the local grant recipient to provide matching funds. To qualify for a grant, the recipient must match 50% of each grant dollar received. The regulatory agency has authorized you to offer a grant of up to \$3,000,000 for work related to the mine site if the County can provide the required 50% fund match and guarantee in writing that it can begin construction within nine months.

Opening Demand

The State of California will make the opening demand. Recognizing that the County is a poor county and economic times are challenging, the State realizes that it likely will not get all that it will ask for, and may have to compromise in some areas.